

Application No.: 10/629,703**Docket No.: 200206985-03 US (1509-429)****REMARKS**

The courtesies extended to the undersigned attorney for applicant during an interview on October 5, 2006, by Examiner Nguyen are noted.

During the interview, Examiner Nguyen indicated that the August 24, 2006 office action was not final and that box 2a) should not have been marked with an "x." During the interview, the examiner accessed PALM that indicates the office action is not final and provided attorney for applicant with a copy of the PALM entry and the corrected Office Action Summary.

At the interview, attorney for applicant indicated the structures relating to the portal front parts and the plug-in patch cable connections are illustrated on the drawing and are respectively denoted by reference numerals 33 and 48, but were not referred to by those names in the specification. Accordingly, the specification has been amended to use the same terminology that is employed in the claims that refer to the portal front parts and plug-in patch cable connections and to make some minor changes. Examiner Nguyen agreed such an amendment to the specification would overcome the objection to the drawings.

During the interview, attorney for applicant noted and Examiner Nguyen agreed that claims 14 and 15 are independent claims and should have been indicated in the office action as allowed, rather than as being objectionable.

Claims 6 and 9 have been amended to define applicant's contribution to the art more particularly.

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To provide applicant with the protection to which he is deemed entitled, claims 36-41 have been added. Claims 36-41 define, in structural terms, features of applicant's underfloor cable junction unit. The newly added claims read on the preferred, illustrated embodiments as follows:

36. An underfloor cable junction unit (31) for installation beneath a raised floor (4) above a base floor (1), the space between the base floor and the raised floor being arranged as a cooling air supply duct (page 14, line 1) for devices (5) arranged to be on the raised floor, the raised floor having panels (3) with cooling air outlets (6), the junction unit having dimensions enabling the unit to be located between the base and raised floors (page 13, lines 22-28), the unit comprising first and second horizontally extending, elongated, spaced members (the structures including faces 33 and carrying data connectors 48a at the top of posts and 34 on the left and right sides of Figure 2) extending generally parallel to each other, sidebars (35 on the left and right sides of Figure 4) extending between first and second parallel planes in which the first and second members are located and affecting the spacing between the parallel planes, structures (posts 34) mechanically connecting the members and sidebars together so the (a) connecting structures, (b) elongated members and (c) and sidebars form a frame having a substantially open top between the spaced elongated members and sides with openings for enabling cooling air between the base floor and the raised floor to flow from outside the frame and through the top toward a panel in the raised floor with cooling air outlets, the first and second members having faces facing away from an interior portion of the frame, the faces of the first and second members including many data connectors (48a and/or 48b) for electromagnetic signals at many different positions in the elongation direction of the first and second members.

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37. The underfloor cable junction unit of claim 36 further including third and fourth horizontally extending elongated members (the members including faces 33 on the left and right sides of Figure 2 that carry connectors 48a and are located between the top and bottom members carrying connectors 48a and 48b) respectively located in the first and second planes, the first and third members being vertically spaced from each other, the second and fourth members being vertically spaced from each other, the spacings between the first and third members and the second and fourth members forming openings for enabling cooling air to flow from outside the frame and through the top toward the panel, the third and fourth members having faces facing away from the interior portion of the frame, the faces of the third and fourth members including many data connectors for electromagnetic signals, the data connectors on the faces of the third and fourth members being at many different positions in the elongation direction of the third and fourth members.

38. The underfloor cable junction unit of claim 37 wherein the first and third members carry plural slide in electrical connector units (38) that engage a face of the members facing toward the interior portion of the frame, the slide in units being arraigned so there is a gap between the slide in members on the first and third members, the gap being such that cooling air in the space between the base and raised floors can flow through the gap from outside the frame and through the top toward the panel.

39. The underfloor cable junction unit of claim 36 wherein the connecting structures include vertically extending posts (34) to which the members and sidebars are mechanically connected.

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40. The underfloor cable junction unit of claim 39 wherein the posts include feet (Figure 1) for supporting the posts and the underfloor cable junction unit on the base floor, the spacing of the posts in the elongation direction of the members and the heights of the members above the base floor being sufficient to enable cables (9, page 15, line 6-9) that extend in the same direction as the sidebars to pass between the posts.

41. The underfloor cable junction unit of claim 39 wherein the posts are connected together by struts (41a) for supporting the posts and the underfloor cable junction in on the base floor, the spacing of the posts in the elongation direction of the members and the heights of the members above the base floor being sufficient to enable cables (9) that extend in the same direction as the sidebars to pass between the posts and above the struts.

The features of new claims 36-41 are not disclosed by the art of record.

At the interview, Examiner Nguyen indicated the various rejections of claims 1, 2, 6-13 and 16-19 were based on his position that functional statements of intended use and/or characteristics would not be considered. Applicant vigorously traverses the examiner's position in this regard. It is well-established that every word of a claim must be considered. In re Wilson, 424 F.2d 1382, 165USPQ 494, (CCPA 1970). In re Swinehart, 439 F.2d 210, 169 USPQ 226 (CCPA 1971) indicated there is nothing wrong with functional statements in a claim and that functional statements are to be encouraged because it is frequently more important to state what something does than the structure that obtains the result. In Swinehart, the prior art had the same structure as the claimed structure, but the claim distinguished over the prior art by defining a functional characteristic of the structure.

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With regard to the rejection of claims 1 and 2 as being anticipated by Domigan, US patent 4,536,612, connectors 27/28 are not connectors for data cables. Instead, connectors 27/28 are power receptacles, as indicated by the statement in column 3 lines 6-8 that says wire connectors 27 and 28 are respectively power-in and power-out connectors. However, the sentence bridging columns 2 and 3 indicates communication section 12 includes an amphenol connector that, in fact, is a data connector used in telephony.

The office action alleges opening 36 and knockouts 40 and 41 of Domigan meet the requirements of claim 1 for the lateral sides or at least a major part of them being open for enabling cooling air to flow through the lateral sides and thereby form part of the cooling air supply duct while the cable junction unit is installed in the duct. However, column 2, lines 29-31 indicates passage 36 receives a telephone or data cable. The telephone or data cable would appear to occupy a substantial portion of passage 36, to preclude the use of the passage for enabling cooling air to flow through it. Column 2, lines 32-35 indicates knockouts 40 and 41 are used to hardwire the box to a conduit in the field. Knockouts 40 and 41, when knocked out, have wires extending through them into power sections 10 and 11 of box 1. In other words, relatively large wires capable of carrying power to box 11 fill knockouts 40 and 41, to preclude the use of the knockouts for enabling cooling air to flow through them.

The office action also alleges that opening 13 in the top side of box 1 meets the requirement of claim 1 for the top side or at least a major part of it to be open to enable passage of cooling air through the top side toward a floor panel of the raised floor.

However, column 2, lines 41-44 indicates floor panel 42 has an access hole 50 aligned

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with opening 13 and that a flush floor fitting or an abandon plate is employed on access hole 50. As a result, opening 13 does not enable cooling air to pass through it because access hole 50 is closed. Base on the foregoing, claim 1 is not anticipated by Domigan.

Claim 2 requires the mounting structure to be arranged to be mounted on a base floor on which the raised floor is posted. In Domigan, box 1 is secured to the raised floor, rather than the base floor.

At the interview, Examiner Nguyen agreed that claim 9 would be patentable if the opposite faces were more specifically defined. To this end, claim 9 has been amended to indicate the opposite faces are on members that are spaced from each other.

Claim 6, as amended, distinguishes over McGrath, US patent 6,541,705, by indicating the underfloor cable junction unit is dimensioned to fit in a cooling air supply duct between a base floor and raised floor. As discussed supra, it is improper for the examiner to not consider the requirement for the device of claim 6 to be an underfloor cable junction unit for installation in a raised-floor system. There is no disclosure in McGrath of the cable management rack thereof being an underfloor cable junction unit with slits between rows of connectors to facilitate passage of cooling air through the junction unit from face-to-face so that open slits thereof thereby form part of a cooling air supply duct while the cable junction unit is installed in the duct.

In view of the foregoing amendments and remarks, favorable reconsideration and allowance are respectfully requested and deemed in order.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025 and please credit any excess fees to such deposit account.

Respectfully submitted,

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